

**Amendments to the Specification:**

Please replace paragraph two on page 13 with the following amended paragraph:

Figure 3 illustrates an example of power control in a CDMA communication system in accordance with one embodiment. The general principles of CDMA communication systems, and in particular the general principles for generation of spread spectrum signals for transmission over a communication channel is described in U.S. patent 4,901,307 entitled "Spread Spectrum Multiple Access Communication System Using Satellite or Terrestrial Repeaters" and assigned to the assignee of the present invention. The disclosure in that patent, i.e. U.S. patent 4,901,307, is hereby fully incorporated by reference into the present application. Moreover, U.S. patent 5,103,459 entitled "System and Method for Generating Signal Waveforms in a CDMA Cellular Telephone System" and assigned to the assignee of the present invention, discloses principles related to PN spreading, Walsh covering, and techniques to generate CDMA spread spectrum communication signals. The disclosure in that patent, i.e. U.S. patent 5,103,459, is also hereby fully incorporated by reference into the present application. Further, the present invention may utilize time multiplexing of data and various principles related to "high data rate" communication systems, and the present invention can be used in a "high data rate" communication systems, disclosed in ~~U.S. patent application~~ U.S. Patent No. 6,574,211, which issued on June 3, 2003, entitled "Method and Apparatus for High Rate Packet Data Transmission" ~~Serial No. 08/963,386~~ filed on November 3, 1997, and assigned to the assignee of the present invention. The disclosure in that patent application is also hereby fully incorporated by reference into the present application.

Please replace paragraph one on page 17 with the following amended paragraph:

As shown in Figure 3, filling  $P_{v, \max}$  306 with voice noise 308; increasing total power  $P_{v+d}$  316 by pre-determined amounts; and filling in  $P_{v+d}$  316 by inserting data noise such as data noise 320 between consecutive data bursts 310 and 312 have the effect of eliminating large swings, overshoots, and instability in the allocation of aggregate voice power  $P_v$  304. For example, filling in  $P_{v+d}$  316 by inserting data noise such as data noise 320 between consecutive data bursts 310 and 312 prevents the overreactions of the power control system to large sudden changes in data power level, discussed in connection with Figure 1, by eliminating such large sudden changes when there are gaps in the data transmission. As a result, aggregate voice power  $P_v$  304 changes smoothly. Increasing total power  $P_{v+d}$  316 by pre-determined amounts also results in eliminating large sudden changes when there are transitions from “quiet periods” to transmitting data bursts or when there are large increases in the rate or amount of data being transmitted by the communication system. Moreover, filling  $P_{v, \max}$  306 with voice noise 308 prevents the feedback effect between cells discussed in connection with Figures 2B and 2C by keeping the voice power, “seen” by other cells as noise, at a constant level, i.e.  $P_{v, \max}$  306. Keeping the voice power at a constant level further prevents large swings in the voice power, such as those seen in Figure 2C, and thus prevents reactions of neighboring cells to those swings. As a result, the intra-cell power control problems discussed above in connection with Figure 1 are avoided, and the inter-cell power control problems discussed above in connection with Figures 2A, 2B and 2C are also avoided.

Please replace paragraph one on page 21 with the following amended paragraph:

As shown in Figure 4, adapting voice power limit  $P_{v, \max}$  406; filling  $P_{v, \max}$  406 with voice noise 408; increasing total power  $P_{v+d}$  416 by pre-determined amounts; and filling in  $P_{v+d}$  416 by inserting data noise such as data noise 420 between consecutive data bursts 410 and 412 have the effect of eliminating large swings, overshoots, and instability in the allocation of aggregate voice power  $P_v$  404. For example, filling in  $P_{v+d}$  416 by inserting data noise such as data noise 420 between consecutive data bursts 410 and 412 prevents the overreactions of the power control system to large sudden changes in data power level, discussed in connection with Figure 1, by eliminating such large sudden changes when there are gaps in the data transmission. As a result, aggregate voice power  $P_v$  404 changes smoothly. Increasing total power  $P_{v+d}$  416 by pre-determined amounts also results in eliminating large sudden changes when there are transitions from “quiet periods” to transmitting data bursts or when there are large increases in the rate or amount of data being transmitted by the communication system. Moreover, filling  $P_{v, \max}$  406 with voice noise 408 prevents the feedback effect between cells discussed in connection with Figures 2B and 2C by limiting the voice power, “seen” by other cells as noise, to slow, smooth, gradual changes, i.e.  $P_{v, \max}$  406 is constrained to pre-defined adjustments. Limiting the voice power to gradual changes further prevents large swings in the voice power, such as those seen in Figure 2C, and thus prevents reactions of neighboring cells to those swings.

Please replace paragraph one on page 22 with the following amended paragraph:

As a result, the intra-cell power control problems discussed above in connection with Figure 1 are avoided, and the inter-cell power control problems discussed above in connection

with Figures 2A, 2B and 2C are also avoided. Furthermore, adaptation of voice power limit  $P_{v, \max}$  406 improves the efficiency and the economy of power control in the communication system by minimizing the amount of extra power used for voice noise filling.

Please replace paragraph one on page 23 with the following amended paragraph:

Continuing with Figure 5, power is allocated in addition to voice power limit  $P_{v, \max}$  506 for transmission of data bursts 510[[,]] and 512, and 514. Total power  $P_{v+d}$  516 is the total of aggregate voice power  $P_v$  504 plus the power allocated for voice noise power 508 plus the power allocated for transmission of data bursts 510[[,]] and 512, and 514. Thus, total power  $P_{v+d}$  516 may also be stated as the total of  $P_{v, \max}$  506 plus the power allocated for data burst transmissions. Data power  $P_{data}$  524 is the power used for transmission of data bursts 510[[,]] and 512, and 514. Thus, by definition:

$$P_{v+d} = P_{data} + P_{v, \max}$$

Total power  $P_{v+d}$  516 is shown in graph 500 as dotted-dashed, stepped line 516. Total power  $P_{v+d}$  516 varies in time as shown in graph 500. The maximum available signal transmission power that can be allocated for the total of aggregate voice, artificial noise, and data transmissions is maximum total power limit  $P_{\max}$  518, shown in graph 500 as horizontal solid line 518 and also indicated by " $P_{\max}$ ". As seen in graph 500,  $P_{v+d}$  516 remains below maximum power limit  $P_{\max}$  518.

Please replace paragraph two on page 25 with the following amended paragraph:

As shown in Figure 5, adapting voice power limit  $P_{v, \max}$  506; filling  $P_{v, \max}$  506 with voice noise 508; reducing data power  $P_{data}$  524 in pre-determined amounts; and filling in  $P_{v+d}$  516 by

inserting data noise such as data noise 520 between consecutive data bursts 510 and 512 or by inserting data noise such as data noise 523 when reducing data power  $P_{\text{data}}$  524 have the effect of eliminating large swings, overshoots, and instability in the allocation of aggregate voice power  $P_v$  504. For example, filling in  $P_{v+d}$  516 by inserting data noise such as data noise 520 between consecutive data bursts 510 and 512 prevents the overreactions of the power control system to large sudden changes in data power level, discussed in connection with Figure 1, by eliminating such large sudden changes when there are gaps in the data transmission. As a result, aggregate voice power  $P_v$  504 changes smoothly. Reducing total power  $P_{v+d}$  516 by pre-determined amounts also results in eliminating large sudden changes when there are transitions from transmitting data bursts to “quiet periods” or when there are large decreases in the rate or amount of data being transmitted by the communication system. Moreover, filling  $P_{v, \text{max}}$  506 with voice noise 508 prevents the feedback effect between cells discussed in connection with Figures 2B and 2C by limiting the voice power, “seen” by other cells as noise, to slow, smooth, gradual changes, i.e.  $P_{v, \text{max}}$  506 is constrained to pre-defined adjustments. Limiting the voice power to gradual changes further prevents large swings in the voice power, such as those seen in Figure 2C, and thus prevents reactions of neighboring cells to those swings.

Please replace paragraph one on page 26 with the following amended paragraph:

As a result, the intra-cell power control problems discussed above in connection with Figure 1 are avoided, and the inter-cell power control problems discussed above in connection with Figures 2A, 2B and 2C are also avoided. Furthermore, adaptation of voice power limit  $P_{v, \text{max}}$  506 improves the efficiency and the economy of power control in the communication system by minimizing the amount of extra power used for voice noise filling. In addition, limiting and

reducing data power  $P_{\text{data}}$  524, improves the efficiency and the economy of power control in the communication system by minimizing the amount of extra power used for data noise filling.